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DISCOVERIES AND CURRENT EVENTS *

Argentine Republic: Experiments on the Control of Scab of Citrus Fruits **.

In the zone of Concordia, Entre Ríos, it has been observed every year that citrus fruits are covered with characteristic marks which diminish, more or less, the commercial value.

It has been noticed that the marks are always accompanied by the presence of mites, in small or large quantities, and it was necessary to determine what was their influence on the production of the marks which is also connected with the fungus *Sporotrichum citri*, Butler.

For this study various products recommended for the control of the mites and fungus were employed.

The trials were carried out in the mandarine orange groves of the Experimental Station of Concordia and a power sprayer at a pressure of 380 to 400 pounds was used. The following ten preparations were employed: soluble sulphur. polisulphide and barium salts; copper and arsenic; Bordeaux mixture; Bordeaux mixture mixed with white emulsionable oil; ammoniacal copper sulphate; ammoniacal copper sulphate mixed with emulsionable whale oil; emulsionable whale oil; white emulsionable mineral oil.

Each preparation was applied to a more or less equal number of plants, a total of 727 trees having been treated and 93 left as control plants. The treatments took place at different epochs: the first, 15-30 days before flowering; the second, after the fall of the petals; the third, 15 days after the second; the fourth, 15 days after the third.

The fruits of the plants treated were fully examined and were found to amount to a total of 561 335 fruits compared to 41 360 fruits on the control plants.

Below will be found the conclusions arrived at:—

(1) From the results obtained it is clearly shown that the marks on the citrus fruits are produced by scab (*Spor. citri*).

(2) That mites found on the fruits do not produce the marks, being probably hidden by the crust, formed by the scab.

(3) That the Bordeaux mixture, as fungicide, is the preparation which gives the best results in the control of scab.

* Under this and the next heading the countries are arranged in French alphabetical order.

** Communication from the official correspondent of the Institute, Mr. JUAN B. MARCHIONATTO, Agronomical 'Ingénieur', Director of 'Sanidad Vegetal', Ministry of Agriculture, Buenos Aires.

(4) That Bordeaux mixture mixed with emulsionable oil is more efficacious.

(5) That copper and arsenic preparation has also given satisfactory results though less so than the Bordeaux mixture.

(6) That ammoniacal copper sulphate alone or mixed with emulsionable whale oil has given negative results.

(7) That both the soluble sulphur and the polisulphide with barium salts have given negative results.

(8) That soluble sulphur, emulsionable whale oil and white emulsionable mineral oil have given no results.

(9) That Bordeaux mixture used in two treatments, one before flowering and the other when the petals fall, diminished considerably the effects of the scab, provided that rains did not influence the result.

(10) That under such conditions, it is not necessary to apply 3-4 treatments.

This work has been carried out by Mr. Kenneth Hayward, Entomologist, Experimental Station of Concordia.

Eritrea: Plant Diseases and Pests Observed since 1930 *.

I. — Cultivated Plants.

Wheat.

Tylenchus tritici Bauer on 'Mentana' wheat (Gaggiret, 1933).

Barley.

Ustilago hordei (Pers.) Lagerh. (Sembel, 1934).

Doura.

Cetonia interrupta (Tessenei, 1930).
Sphacelotheca sorghi (Link) Clinton (Seraè, 1930).

Maize.

Ustilago maydis (D.C.) Tul. (Faghenà, 1930).
Puccinia maydis Bér. (Dicsana, 1930).

Broad Beans.

Uromyces fabae (Pers.) de By. (Medrizien, 1930).

* Communication from the Agricultural Bureau of Eritrea, transmitted to the Institute by the Government of the Colony.

Tomato.

Virus diseases of the mosaic group (Om-Ager–Setit, 1933).

French Beans.

Uromyces appendiculatus (Pers.) Link (Faghenà, 1930).
Bacterium phaseoli EFS., on pods (Faghenà, 1930).
Phaeoisariopsis griseola (Sacc.) Ferr., on pods (Faghenà, 1930).

Coffee.

Apate monachus F. (M. Savour, 1930).
Sphaerella coffeicola Cooke (Faghenà, 1930).
Lecanium viride Green (Dicsana, 1930).
Sooty mould produced by *Phaeosaccardinula* sp. (Dicsana, 1930).
Withering of the tips and edges of leaves (V. Dorfù, 1933).

Solanu muricatum.

Mosaic (Asmara, 1932).

Bananas.

Aspidiotus cydoniae, on stems and leaves (V. Dorfù, 1932).
Nigrospora sphaerica Mason and *Stachylidium theobromae* Turc. (V. Dorfù, 1932).

Cotton.

Dysdercus sp. (Focò, 1930).
Oxycarenus sp. (Focò, 1930).
Earias biplaga Wlk., on bolls (Tessenei, 1930).
Bacterium malvacearum EFS., on stems and leaves (Tessenei, 1930).
Nisotra uniformis Jac., on leaves (Tessenei, 1932).
Heliothrips indicus Bagn. (Tessenei, 1932)
Aspergillus niger Bref., on bolls (Tessenei, 1933).
Boll rot (Tessenei, 1934).

Mandarin.

Drosophila mustorum, on fruits (Elaberet, 1931).
Aspidiotus hederae (Vall.) Sign., on fruits (Cheren, 1931).
Chlorosis (foliocellosis) (Elaberet – V. Dorfù, 1933).
Icerya purchasi Mask. (Elaberet, 1933).

Grapefruit.

Chlorosis (Elaberet, 1933).
Chrysomphalus dictyospermi (Morg.) Leon. (Cheren, 1934).

Bitter orange.

Rhizoctonia solani K. (Eastern slopes, 1930).

Persea gratissima.

Withering of leaf edges (V. Dorfù, 1933).

Date Palm.

Graphiola phoenicis (Moug.) Poit. (Barentù, 1932).

Fig.

Simaethis nemorana Hb. (Asmara, 1930).
Uredo fici Cast. (Asmara, 1930).
Trabutia chinensis Yates (Asmara, 1930).

Apple.

Schizoneura lanigera Hausm. (Maharano – Hamasien, 1933).

Peach.

Puccinia cerasi (Bér.) Cast. (Faghenà, 1930).
Exoascus deformans (Berk.) Fuck. (Asmara, 1934).
Sphaerotheca pannosa (Wallr.) Lév. (Asmara, 1934).

Castor oil Plant.

Melampsora ricini Pass., on leaves (Dicsana, 1930).

II. — Wild Plants.

Abutilon.

Puccinia heterospora Berk. and Curt. (1930).

Aloë.

Uromyces aloës (Cke.) Magn. (Anagullè, 1930).

Acokanthera schimperi.

Sooty mould (M. Savur, 1930).

Schinus molle.

Saissetia nigra (Bet Ghergis – Asmara, 1931).

Ficus decdekena.

Ceroplastes sp. (1932).
Saissetia oleae Ckll. (1932).

Acacia cyanophylla.

Aspidiotus hederae (Vall.) Sign. (Asmara, 1934).
Eulecanium corni Bouché var. *robiniarum* March. (Asmara, 1934).

Mozambique: Locust Movements (*Nomadacris septemfasciata* and *Locusta migratoria migratorioides*) *.

During the month of August, 1935, contrary to the centre and south, there have been no reports on the appearance of locusts in the north of the Colony.

In 13 districts in the region of Zambezia, swarms have been noted, some of them very large. Some flew towards the interior and others towards the north.

In the province of Sul do Save, in the coastal zone of Inhambane, a few swarms have been reported, some of which flew towards the interior, principally towards the circumscription of Homoine, while others flew towards the coast; a swarm fell into the sea in the neighbourhood of Massinga.

A swarm which settled in Manjacaze flew towards Gaza (Bilene).

A swarm passed over Caniçado which afterwards was seen in Bilene. In Manhiça swarms have also been seen.

The swarm which passed over the town of Lourenço Marques on the 6th. was the same swarm as that which crossed over the frontier of Zululand on 20 July. This swarm afterwards passed over Matola towards the south.

Another swarm passed over Matola at the end of the month in the direction of Maputo and was followed by a large flight of storks.

In conclusion, the situation in the north was good during the month, while it remained unchanged in the centre and south.

During the month of September, 1935, the north of the Colony remains free from locusts. In Zambezia locust movements take place, the swarms flying about without any fixed direction.

In the province of Sul do Save and in the neighbourhood of the banks of the Limpopo the greatest number of swarms are to be found, also in the coastal district of Inhambane.

In the circumscription of Maputo only one swarm has been reported on the frontier of Catuane.

Mozambique: Methods Employed in Locust Control *.

Spraying with sodium arsenite. This process is without doubt the most efficacious and the most widely used in the control of locusts, however, on account of its toxic action on men and animals and its injurious effect on plants, it cannot be used in places where there is a shortage of water.

In order to avoid the danger incurred in its use, all the natives who work with sodium arsenite smear themselves with mineral or vegetable oils and the Europeans wear gloves. All gangs of workmen are provided with antidotes. The districts sprayed are surrounded with red posts to warn hersdmen to keep their cattle away from these danger zones.

* Communication from Mr. JULIO GARDÉ ALFARO CARDOSO, Chief of the Entomological Section, Lourenço Marques, transmitted to the Institute by the 'Repartição Tecnica de Agricultura' of the Colony.

By those means no serious cases of poisoning have been reported with the exception of the foreman of a European gang who has been attacked with paralysis and taken to hospital. This foreman was accustomed to working with highly concentrated solutions and it is thought that the poisoning occurred through breathing in sodium arsenite with the water vapour given off by the solution when the receptacle was opened, also on account of the heat during that season in that district. No losses of cattle have been reported.

The increasing efficacy of spraying with sodium arsenite has been verified.

The spraying apparatus which, on account of its cheapness and practibility, has given the best results was called type ' balde ', used like a gasoline tin. The type Vermorel has also given good results and the flame-thrower (Four Oaks) adapted as a spraying pump has a wide radius of action.

The solution used for the young hoppers was 90 grammes of sodium arsenite to 18 litres of water and for further developed hoppers 110 grammes of arsenite to the same quantity of water.

Dusting with sodium arsenite. This was not greatly used on account of its costliness; this year, however, its use became more common owing to the new « Barlow » pump.

Dusting with calcium arsenite has not given positive results.

Ditches. Greatly used at various times. The natives adopt this system readily owing to the fact that there is no danger in it. Many locusts are destroyed by this means though it is not a complete system. It may be used in districts where there is a shortage of water and where labour is easily available.

Barriers of zinc sheets. Used in the plantations with good results. Their cost and transport are expensive. This system can, however, be recommended for rich plantations, particularly sugar-cane, millet and bananas.

Crushing of hoppers. When no other means are available good results may be obtained by crushing the hoppers with branches.

Burning hoppers. Burning will give good results if the ' capim ' is dry, however, in the period of development of the hoppers (January and March) it is green and does not burn easily. In some parts some larval bands were destroyed by fire, with the help of petrol and gasoline.

Flame-throwers. Used as a supplementary method in the system of ditching for the control of hoppers which have settled in trees and bushes, it is fairly efficacious, but very costly.

Its chief use is against adults and should be employed on rainy nights when the locusts cannot fly. A gang with flame-throwers can destroy a swarm in a few nights.

Aircraft. Though the use of aircraft is considered the best method for the control of swarms it has not yet been tried as the results of experiments with this system in Rhodesia and the Union of South Africa are being awaited.

It is thought that the cloud of sodium arsenite dust, though it controls the swarms, can be very dangerous to men and cattle.

In the experiments in Zululand a certain mortality among cattle and domestic animals has been verified.

Further studies should be made in order to obtain another product (gas or dust) which is not as dangerous as sodium arsenite, as, as far as the use of aircraft is concerned, the problem has been solved.

Southern Rhodesia: Locust Invasion, 1932-1935 *.

Monthly Report No. 34. September, 1935.

During the first half of the month, the Red Locust (*Nomadacris septemfasciata*) Serv.) was more in evidence than during the previous part of the dry season.

Swarms, some described as being of 'enormous' size, were reported in various districts, including the following, namely: Salisbury, Melsetter, Mazoe, Gwelo, Lomagundi, Umtali, Sebungwe, Inyanga, Hartley, Makoni, Bubi, Victoria, Belingwe, Chibi, Nyamandhlovu and Insiza.

After the 19th, the number of swarms reported decreased greatly, and none at all were reported during the last six days of the month.

The swarms have been moving in all directions, and if the majority have left the Colony, it is not possible to state to what country they have departed.

All specimens received have been healthy. Most have shown a very pronounced red colour with the pink suffusion shewing at the base of the hind wings. The testes of the males are developing but there is no sign of ovarian development in the females as yet.

Some damage to young grass, small grain and trees has been reported in various localities.

Reports from Northern Rhodesia indicate a more favourable position than at this time last year, and on the whole the outlook for the coming season appears reasonably hopeful.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Germany. — A Decree of 31 October, 1935, contains prescriptions for the application of the Law of 26 June, 1935, relative to the protection of natural sites and rare plants and animals [see this *Bulletin*, 1935, No. 10, p. 226]. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Dezember 1935, Bd. VII, Nr. 10, S. 202-208).

*** The Law of 13 November, 1935, amends the Law of 6 July, 1904, relative to the control of grape phylloxera [*Phylloxera vastatrix*]. The amendments apply to §§ 9, 10, 11, 12, and 13 which establish the penalties to be inflicted

* Communication from the official correspondent of the Institute, Mr. RUPERT W. JACK, F. E. S., Chief Entomologist, Agricultural Laboratory, Department of Agriculture, Salisbury, Southern Rhodesia.

on persons contravening the Law. The Ministry of Agriculture will fix the prescriptions necessary for the application of the said Law. Paragraph 9 stipulates that whoever voluntarily spreads grape phylloxera will be punished not only by a fine, but will be liable to one month's imprisonment. (*Ibid.*, S. 208-209).

Germany (Mecklenburg-Schwerin). — By Police Ordinance of 30 September, 1935, the control of rats is rendered compulsory. The police authorities will indicate the days on which the general control will take place. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. November 1935, Bd. VII, Nr. 9, S. 177-178).

Argentine Republic. — By Decree No. 62.906, passed in the Council of Ministers on 2 July, 1935, approval was given to the course adopted by the Ministry of Agriculture on the occasion of the last campaign against locusts [*Schistocerca paranensis*], *viz.*, the supply 1,778,996.50 metres of barriers on loan free of charge to the farmers forming a syndicate, for use in the collective campaign. This loan was additional to the 4 million metres of barriers the supply of which, on similar conditions, was authorised by Decree No. 52.649, of 3 December, 1934.

The first of these consignments of barriers will be valued, for purposes of sale, hire, or compensation in case of loss, at the prices determined by Decree No. 56.910 of 6 March, 1935 [see this *Bulletin*, 1935, No. 12, p. 276]. (*Boletín Oficial de la República Argentina*, Buenos Aires, 28 de octubre de 1935, año XLIII, núm. 12.403, pág. 1430).

*** The Decree No. 64.619 of 30 July, 1935, authorises the expenditure of one million 'pesos' for expenses that are incurred in the control of the South American locust [*Schistocerca paranensis*] for the period 1935-1936, namely purchase of live locusts, salaries paid for moving material, transport, freights, indemnities, digging of ditches and acquisition of sacks, casual labour, sundries, etc.). (*Ibid.*, 15 de noviembre de 1935, núm. 12.417, pág. 541).

*** By Law No. 12.193 of 7 September, 1935, the Executive Power is authorised to spend the sum of five million 'pesos' on the control of the South American locust [*Schistocerca paranensis*] during the season 1935-1936. (*Ibid.*, 14 de septiembre de 1935, núm. 12.367, pág. 531).

*** The Decree No. 67.248 of 18 September, 1935, regulates the distribution of barriers used for the control of locusts [*Schistocerca paranensis*]. (*Ibid.*, 7 de octubre de 1935, núm. 12.386, pág. 338).

*** By Decree No. 67.249 of 18 September, 1935 as from 1 November, 1935, cotton seed (raw or ginned cotton) may not be transported outside the zone declared infested by pink bollworm (*Pectinophora gossypiella*, Saund.)

unless accompanied by a sanitary permit for free transit in which it is specifies that they have been disinfected.

The sanitary permits for free transit will be issued by the ' Servicio de Fiscalización Sanitaria Algodonera ' of the ' División de Fiscalización Sanitaria Vegetal ' dependent on the ' Dirección de Sanidad Vegetal ', and, in order to be valid, should be signed and stamped by the regional technical inspector of the said Service.

Within the infested zone, free transit will be permitted to consignments of disinfected cotton seeds, also consignments of non-disinfected seeds intended for industrial use.

Consignments of disinfected cotton seeds for industrial use outside the infested zone will be accompanied by the sanitary permit across which is written ' Unsuitable for sowing '. In this case the label and seal on the packages may be replaced by an official stamp on each consignment the number of which and the words ' Unsuitable for sowing ' must be entered in the respective permit. In all cases the consignments should be despatched in packages without holes or repairs. (*Ibid.*, 23 de septiembre de 1935, núm. 12.374, pág. 879).

Chile. — By Decree No. 974 of 25 August, 1935, which permits, as from 1 April, 1936, the importation, into the whole territory of Chile, of cherimoyas [*Anona cherimolia*] produced in the valley of Moquegua, Peru, these fruits should arrive in cases or boxes secured by two transversal iron wires, placed round, the ends and each secured with an unbreakable leaden seal or mark bearing the seal of the Agricultural Experiment Station of Moquegua.

Each consignment should be accompanied by a certificate of the Peruvian Phytopathological Service stating that the cherimoyas have been grown in the valley of Moquegua and that no fruit fly (*Anastrepha* sp.) exists in the said valley. The fruits should be despatched solely from the port of Ilo and should be transported only by sea. It is prohibited to send by post or to transport in the baggage of passengers.

The present Decree will come into force after 1 April, 1936, always provided that the Peruvian Government, following a new inspection of the valley of Moquegua after 1 February, 1936, again declares the said valley to be free from fruit fly. The same will apply to 1937 and successive years.

Cherimoyas can only be disembarked at the ports of Chile after inspection by the inspectors of the Phytopatological Service. These inspectors will examine the documents and leaden seals and will not permit disembarkment if these are not in order. They will also examine the sanitary condition of the fruits, opening the number of cases they consider necessary. The leaden seals will not be replaced.

The presence of larvae of fruit fly in the cherimoyas or any other pest non-existent in Chile will be considered sufficient reason for the destruction of the consignment.

Cherimoyas entering by the ports to the north of Taltal cannot be forwarded to the south of these ports, nor can they be transported to the south of Taltal by railway or any other means of land or air transport. All regulations in force

in respect of the transport of fruits within the country will be applied to cherimoyas of Moquegua. (*Boletín del Ministerio de Agricultura*, Santiago de Chile julio-agosto-septiembre 1935, año LIV, núm. 5, págs. 273 y 274).

French Colonies. — By a Decree of the Ministry of the Colonies, dated 15 November, 1935, Art. 6 of the Ministerial Decree of 22 February, 1926 [see this *Bulletin*, 1935, No. 6, pp. 134-135] relating to the introduction of cotton seed into the French Colonies with a view to protection against the pink bollworm [*Pectinophora gossypiella*], was modified as follows:—

'The provisions of the present Ministerial Decree are applicable to the products enumerated in Art. 1 and presented for import or for transit in all French Colonies with the exception of Madagascar, New Caledonia, French Equatorial Africa, Indo-China (Cambodia and Cochin China only), the New Hebrides and Guadeloupe'.

'The prohibitions contained in Art. 1 of the present Ministerial Decree are applicable to such of the products designated as come from Egypt, the Anglo-Egyptian Soudan, Italian Somaliland, former German East Africa, British East Africa, Nigeria, Sierra Leone, Angola, Lagos, the Belgian Congo, French Equatorial Africa, Algeria, Tunis, Morocco, Madagascar, New Caledonia, the New Hebrides, Zanzibar, from Asia (with the exception of Indo-China, Tonkin and Annam), from Brazil, Mexico, the Hawaiian Islands, the Samoan Islands, from Australia, the British West Indies, Guadeloupe, Texas, Louisiana, New Mexico (United States of America), and from Greece'. (*Journal Officiel de la République française*, Paris, 26 novembre 1935, LXVII[e] année, n° 276, p. 12430).

Egypt. — A Ministerial Decree of 6 October, 1935, fixes the dates before which the operations provided for in Article 1 of the Law No. 20 of 1921, relative to the measures to be taken for the destruction of the insects injurious to cotton seeds and bolls, should be carried out for the year 1935. (*Journal Officiel du Gouvernement Egyptien*, [Le Caire], 14 octobre 1935, 62[ème] année, n° 92, p. 3-4).

India. — By Notification of the Government of India in the Department of Education, Health and Lands, No. F. 145/35, dated 23 April, 1935, the importation of 'Mexican Jumping Beans' (*Sebastiania palmeri* of the family Euphorbiaceae) is prohibited absolutely. (*Agriculture and Live-stock in India*, Delhi, September, 1935, Vol. V, Pt. V, p. 587).

Italy. — A Ministerial Decree of 30 March, 1935, approves the official methods of analysis for substances used in agriculture. It also contains methods concerning fungicides and insecticides. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 22 novembre 1935, anno 76°, n. 272, p. 5458).

*** By Ministerial Decree of 30 September, 1935, pyrethrum powder [*Chrysanthemum cinerariaefolium*], originating in the island of Lagosta, is admitted duty free into the Kingdom, up to an annual quota of 15 quintals. (*Ibid.*, 17 ottobre 1935 n. 243, p. 5034).

*** By Ministerial Decree of 27 October, 1935, the commune of Arcevia, province of Ancona, is declared infested with grape phylloxera. (*Ibid.*, 5 novembre 1935, n. 257, p. 5291).

*** By Ministerial Decree of 12 November, 1935, the communes of Carinola and Sessa Aurunca, province of Naples, have been declared infested with grape phylloxera. (*Ibid.*, 23 novembre 1935, n. 273, p. 5467).

*** By Ministerial Decree of 16 November 1935, the communes of Berano, Forio d'Ischia, Lacco Ameno, and Serrara Fontana, province of Naples, have been declared infested with grape phylloxera. (*Ibid.*, 20 novembre 1935, n. 279, p. 5535).

Morocco (French Zone). — A Decree of the Director of Waters and Forests, dated 25 October, 1935, authorises the destruction of rabbits causing great damage to crops and plantations in the circumscription of civil control of the Zemmour. (Empire chérifien. Protectorat de la République française au Maroc. *Bulletin Officiel*, Rabat, 8 novembre 1935, XXIV[e] année, n° 1202, p. 1264).

*** A Decree dated 8 November, 1935 has been issued by the Director of Waters and Forests, authorising the extermination of rabbits within a certain zone of the circumscription of civil control of Rabat-banlieue. (*Ibid.*, 22 novembre 1935, n° 1204, p. 1309).

*** By Decree of the Director General of Agriculture, Commerce and Colonisation, dated November, 1935, completing the Decree of 1 April, 1933, relative to the application of sanitary measures to potatoes, tomatoes and aubergines on their entry to the French Zone of the Sherifian Empire [see this *Bulletin*, 1933, No. 6, pp. 131-132], consignments of potatoes may also be imported by the port of Agadir when their total weight is at least 100 quintals, under the express condition that the importers interested are responsible for costs of transport and the travelling expenses of the inspector for plant protection of Marrakesh, estimated according to the official tariffs then in force. (*Ibid.*, 29 novembre 1935, n° 1205, p. 1342).

*** By Decree of the Director General of Agriculture, Commerce and Colonisation of 15 November, 1935, empty used sacks may be imported, in addition to the ports and post established in Article 1 of the Decree of 31 March, 1933 [see this *Bulletin*, 1933, No. 6, p. 131], by the ports of Rabat, Mazagan, Safi

and Mogador whenever the total weight of the consignments is not less than 100 quintals.

If fumigation or disinfection is ordered by the inspector for plant protection, the consignments recognised to be infested are, according to the wishes of the consignee, returned or sent by sea to the ports of Casablanca or Port Lyautey. (*Ibid.*, p. 1342).

*** By Decree of the Director of Waters and Forests, dated 20 November, 1935, it is authorised to destroy rabbits causing great damage in a zone of the circumscription of civil control of the environs of Meknès. (*Ibid.*, p. 1342-1343).

*** By Decree of the Director of Waters and Forests, dated 22 November, 1935, owners or tenants of land situated in the territory of the post of civil control of Tedders, circumscription of the Zemmour, are authorised to destroy wild boars on their land at all times and by all means except by fire. (*Ibid.*, p. 1343).

Mexico. — An ' Acuerdo ' of 19 September, 1935, authorises the ' Dirección de Agricultura ' to interpret and apply the Regulations on ' Policía Sanitaria Agrícola ' and the provisions relative thereto. (*Diario Oficial*, México, 2 de octubre de 1935, tomo XCII, núm. 26, págs. 497 y 498).

Peru. — By letter dated 5 July, 1935, the Director of Agriculture and Animal Husbandry has communicated to the President of the National Agricultural Society that the ' Junta de Sanidad Vegetal ' has agreed – for the better execution of the measures in force relative to the protection of the valley of the Cañete against the pest of ' piojo blanco ' of cotton [see this *Bulletin*, 1935, No. 4, p. 91] – to recommend the farmers in the said valley to prevent the entry to their lands of cattle which have been pastured on the pampas of Imperial and Lunahuaná. The object of the said recommendation is to prevent the cattle from fields infested with ' piojo blanco ' [*Hemichionaspis minor*] carrying the said parasite with them and thus bringing the infection to the valley of the Cañete. (*Boletín de la Compañia Administradora del Guano*, Lima, Perú, septiembre 1935, vol. XI, no. 9, pág. 451).

*** The Resolution No. 82 of 25 July, 1935, prohibits, under pain of a fine, the introduction into the valley of Moquegua, which is free from fruit fly (*Anastrepha* sp.), of all classes of fruits, vegetables, plants or parts of living plants, flowers, etc., proceeding from any part of the country or from abroad, with the exception of the plants which are introduced by the ' Dirección de Agricultura y Ganadería ' for the purpose of supplying the agricultural requirements of the said valley. (*El Peruano*, Lima, 7 de agosto de 1935, año 95, tomo II, trimestre III, no. 171, pág. 684).

*** By Resolution of 2 August, 1935, approval is given to the regulation of the Resolution No. 82 mentioned above. (*Ibid.*, págs. 684 y 685).

Rumania *. — By Ministerial Decree No. 211077 of 23 November, 1935, an observation post for the study of locusts has been established in the region of the Danube delta with headquarters at Sulina, department of Tulcea.

Czechoslovakia. — By Decree of 30 July, 1934, based on the Decree of 19 July, 1934, relative to the control of San José scale [*Aspidiotus perniciosus*], it is established that measures for preventing the introduction of that scale insect will be also applied to consignments of living plants, fresh fruits and vegetables which, though originating from countries not infested, have previously been imported into infested countries from which they have been re-exported. (*Deutsches Handels-Archiv*, Berlin 1935, 89. Jahrg., 2. Novemberheft, S. 3749).

Yugoslavia. — The Regulation No. 63401/II of 27 September, 1935, provides for the installation of disinfection chambers, by hydrocyanic acid gas, for plants and parts of plants. (*Službene Novine*, Beograd, 14 oktobar 1935, godina XVII, broj 237-LVIII, str. 932-933).

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ASSOCIAÇÃO DOS OLIVICULTORES DE PORTUGAL. Actes du XI[ème] Congrès international d'Oléiculture. Lisbonne, 26 novembre-1[er] décembre 1933. Vol. II. Lisboa, Ateliers Gráficos Bertrand (Irmãos), L.da, 1935, 279 p., 14 fig.
[Contains, *inter alia*:—
La fumigation des oliviers au moyen du cyanure de calcium pour combattre le « Liothrips oleae », par Miguel Benlloch et José del Cañizo (p. 5-13, fig. 1-6).
Eléments pour l'étude du combat contre la mouche de l'olivier (*Dacus oleae*), par Santos Garcia (p. 15-21).
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NOTES

Fiftieth Anniversary of the Discovery of Bordeaux Mixture. — On 6 December, 1935, the Society of Plant Pathology and Agricultural Entomology of France held, at the Natural History Museum in Paris, a meeting to celebrate the memory of Professor Millardet and the fiftieth anniversary of his discovery of Bordeaux mixture in 1885.

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